

REMARKS

Claims 1-21 continue to be the pending claims in the application.

Reconsideration of the application in light of the remarks which follow is respectfully requested.

The Examiner has rejected claims 1-21 under 35 U.S.C. § 103(a) as being unpatentable over Ahluwalia (US 5,965,257) in view of Langer (US 4,600,634) and GB 2167060 (GB '060) or Dugan (US 4,994,317) or Dombeck (US 6,228,497).

**I. Claim 1 - The Office Action Fails To Address the “Consisting Essentially of” Recitation Which Clearly Excludes a Substrate**

The Office Action states that “. . . the claims do not preclude the use of a substrate, as presently written, . . .” and that the transitional phrase *consisting essentially of* “. . . only excludes components that will affect the basic and novel characteristics of the [claimed] invention.” *See* Office Action, page 4. In other words, the Office Action asserts that modifying the composite material recited in Claim 1 to include a substrate would NOT affect the basic and novel characteristics of the claimed invention. Applicants respectfully disagree.

Applicants specification describes embodiments which include, among other materials, a first layer and a second layer, and may or may not include a substrate depending on the usage of the composite material formed.. *See* the specification as originally filed, paragraphs 26 and 45, as well as claim 1. As discussed in at least paragraph 45 of the specification, a substrate significantly affects basic and novel characteristics of Applicants’ invention by at least altering the strength of the composite material. Accordingly, depending upon the implementation sought, such as those described at paragraphs 49 and 50, the tradeoffs between including a substrate and NOT including a substrate must be considered to reach, for example, a particular level of strength.

For at least the above reasons, Applicants respectfully submit that a substrate does affect the basic and novel characteristics of the invention recited in Claim 1 and is therefore excluded by the transitional phrase *consisting essentially of*.

In view of the foregoing, Applicants respectfully reiterate the previous argument regarding a substrate being excluded from Claim 1. *See* Applicants' response of July 28, 2008, pages 2 and 3. Particularly, if a person of ordinary skill in the art were motivated to increase the strength and durability of a structural article, he or she would not omit an element — the substrate — while retaining the element's function. *See, In re Edge*, 359 F.2d 896, 149 U.S.P.Q. 556 (CCPA 1966) cited at M.P.E.P. Section 2144.04, page 2100-148. For at least this reason, the Office Action has failed to establish a *prima facie* case of obviousness against Claim 1.

Accordingly, the rejection under 35 U.S.C § 103(a) is deemed obviated, and its withdrawal is respectfully requested.

**II. Claim 2 - The Office Action's Proposed Combination Does Not Teach or Reasonably Suggest "Said Coating Does Not Bleed Through Said Substrate"**

The Office Action states that Applicants' response of July 28, 2008 is "not persuasive because Applicant cannot show non-obviousness by attacking references individually where, as here, the rejections are based on a combination of references." *See* Office Action, page 5. While Applicants agree that the proposed combination must be considered as a whole, Applicants also respectfully submit that a piecemeal analysis of each recitation in the claim without considering the breadth of the claim as a whole is improper. *See* MPEP § 2106 II C ("Finally, when evaluating the scope of a claim, every limitation in the claim must be considered. USPTO personnel may not dissect a claimed invention into discrete elements and then evaluate the elements in isolation.").

Claim 2 recites more than a mere combination of known elements. Even if it were obvious to one of ordinary skill in the art to modify Ahluwalia '257 to: 1) adhere a metallic component to the coated substrate of Ahluwalia '257 and 2) include clay in the filler material of Ahluwalia '257, the Office Action has still failed to establish a *prima facie* case of obviousness against Claim 1 for at least the following reasons.

Claim 2 recites, in part, “. . . wherein said coating does not bleed through said substrate; . . .” (emphasis added).

Apparently the Office Action relies on Ahluwalia '257 as teaching the feature of “said coating does not bleed through said substrate.” *See* Office Action, pages 2 and 3. That teaching in Ahluwalia '257 however, only applies to the specific structure and composition of the composite materials disclosed in Ahluwalia '257. Indeed, Ahluwalia '257 identified that composite materials with a different structure and composition are known to bleed through the substrate. *See* Ahluwalia '257 Col.1, lines 12-63. Further, Ahluwalia '257 specifies that the filler component of the inventive zero bleed through coating is selected from the group consisting of fly ash, charged calcium carbonate, ceramic microspheres and mixtures thereof. Clay is not included in that group. The Office Action provides no rationale whatsoever as to how the composite materials disclosed in Ahluwalia '257 would need to be modified in order to achieve a new composite material which includes the admittedly lacking elements of Claim 2 and a coating that does not bleed through the substrate. Nor does the Office Action provide any rationale as to how the composite materials disclosed in Ahluwalia '257 could be modified to include the admittedly lacking elements of Claim 2 while maintaining a first layer that does not bleed through the substrate. In addition, the Office Action fails to account for the leap of logic as to how characteristics of the Ahluwalia '257 composite materials will also exist in the Office Action's proposed composite material, especially when the Office Action fails to provide any

level of specificity as to the specific structure and composition of the proposed composite material.

A review of the other art cited (Langer, GB '060, Dugan and Dombeck) has failed to reveal anything that, in Applicants' opinion, would remedy these deficiencies in the Office Action's obviousness rationale against Claim 2. As discussed in the response of July 28, 2008, those references are silent with regard to a coating that has essentially the same ionic charge as the substrate it coats and that does not bleed through the substrate.

Accordingly, the rejection under 35 U.S.C § 103(a) is deemed obviated, and its withdrawal is respectfully requested.

Should the Office maintain this rejection despite the foregoing, Applicants respectfully request the Office to explain in detail specifically how the composite materials of Ahluwalia '257 could be reconstructed while maintaining a first layer that does not bleed through the substrate, as proposed in the Office Action.

**Conclusion**

Based on the foregoing, allowance of the claims is earnestly solicited. Please send any further correspondence relating to this application to the undersigned attorney at the address below.

Applicants believe no fee is due in connection with this communication. However, should any fee be due in connection with this communication, the Commissioner is authorized to charge any such fee to Deposit Account No. 06-1205.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

/Alicia A. Russo/  
John D. Murnane  
Registration No. 29,836

Alicia A. Russo  
Registration No. 46,192  
Attorneys for Applicants

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3800  
Facsimile: (212) 218-2200